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EXAMINER	
POPHAM, JEFFREY D	

ART UNIT	PAPER NUMBER
2137	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,079	MERCHANT ET AL.	
	Examiner	Art Unit	
	JEFFREY D. POPHAM	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20050808, 20070713, 20080228*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Remarks

Claims 1-45 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 2, 4-6, 9, 10, 12-16, 18, 21, 22, 24, 39-42, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Stewart (U.S. Patent 6,732,176).

Regarding Claim 1,

Stewart discloses a method of controlling access to a network comprising:

Requesting an identity from a client attempting to connect to the network (Column 10, line 64 to Column 11, line 16);

Receiving the identity (Column 10, line 64 to Column 11, line 16);

Associating location information with the identity (Column 11, lines 17-53);

Authenticating the identity (Column 9, lines 28-47; Column 12, line 30 to Column 13, line 10; and Column 18, lines 1-25);

Comparing the location information against a policy designating locations, if any, at which the client is permitted to connect to the network (Column 11, lines 28-53 and Column 16, lines 38-64); and

Deciding whether to grant or deny the client access to the network based on the authenticity of the identity and the comparison of the location information (Column 11, lines 28-53 and Column 15, line 16 to Column 16, line 64).

Regarding Claim 39,

Claim 39 is a system claim that corresponds to method claim 1 and is rejected for the same reasons.

Regarding Claim 2,

Stewart discloses passing the identity and the location information to an authentication server, wherein the authentication server performs the steps of authenticating, comparing and deciding (Column 10, line 64 to Column 11, line 16; and Column 14, lines 40-56; authentication server being the MIB or other device 150).

Regarding Claim 4,

Stewart discloses that the identity includes information selected from the group consisting of a user name, a user password, a certificate, a MAC address, a shared encryption key, a smart card identifier, and any combination of the foregoing information (Column 10, lines 53-63).

Regarding Claim 40,

Claim 40 is a system claim that corresponds to method claim 4 and is rejected for the same reasons.

Regarding Claim 5,

Stewart discloses that the client is a user station capable of connecting to the network through an access point (Column 10, line 64 to Column 11, line 16).

Regarding Claim 41,

Claim 41 is a system claim that corresponds to method claim 5 and is rejected for the same reasons.

Regarding Claim 6,

Stewart discloses that the client is a wired device capable of connecting to the network through an Ethernet switch port (Column 5, lines 2-24; Column 6, lines 40-59; and Column 9, lines 48-64).

Regarding Claim 42,

Claim 42 is a system claim that corresponds to method claim 6 and is rejected for the same reasons.

Regarding Claim 9,

Stewart discloses that the location information indicates the location of an edge device for connecting the client to the network (Column 10, line 64 to Column 11, line 16).

Regarding Claim 45,

Claim 45 is a system claim that corresponds to method claim 9 and is rejected for the same reasons.

Regarding Claim 10,

Stewart discloses a network system comprising:

An authenticator for requesting an identity from a client and for associating location information with the identity (Column 10, line 64 to Column 11, line 16); and

An authentication server, receiving the identity and associated location information from the authenticator, for deciding whether to grant or deny the client access to the network based on the identity and the location information (Column 9, lines 28-47; Column 12, line 30 to Column 13, line 10; Column 14, lines 40-56; Column 16, lines 38-55; and Column 18, lines 1-25).

Regarding Claim 12,

Stewart discloses that the authenticator resides in an edge device (Column 10, line 64 to Column 11, line 16).

Regarding Claim 13,

Stewart discloses an edge device for connecting a user station to a network switch (Figures 2-3).

Regarding Claim 14,

Stewart discloses that the edge device is a wireless access point (Column 10, line 64 to Column 11, line 16).

Regarding Claim 15,

Stewart discloses that the user station is a wireless device capable of connecting to the network through the access point (Column 5, lines 1-14; and Column 10, line 64 to Column 11, line 16).

Regarding Claim 16,

Stewart discloses that the client is a wired device capable of connecting to a network switch through an Ethernet port (Column 5, lines 2-24; Column 6, lines 40-59; and Column 9, lines 48-64).

Regarding Claim 18,

Stewart discloses that the location information indicates the location of an edge device for connecting the client to the network (Column 10, line 64 to Column 11, line 16).

Regarding Claim 21,

Stewart discloses that the authentication server authenticates the identity (Column 9, lines 28-47; Column 12, line 30 to Column 13, line 10; Column 14, lines 40-56; Column 16, lines 38-55; and Column 18, lines 1-25).

Regarding Claim 22,

Stewart discloses that the authentication server includes a policy designating locations, if any, at which the client is permitted to connect to the network (Column 11, lines 28-53 and Column 16, lines 38-64).

Regarding Claim 24,

Stewart discloses that the identity includes information selected from the group consisting of a user name, a user password, a certificate, a MAC address, a shared key, a smart card identifier, and any combination of the foregoing information (Column 10, lines 53-63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3, 11, 20, 23, 27-29, 31, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart in view of Kwan (U.S. Patent Application Publication 2004/0255154).

Regarding Claim 3,

Stewart does not explicitly disclose that the authentication server is a RADIUS server.

Kwan, however, discloses that the authentication server is a RADIUS server (Paragraph 57). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the multi-tiered network security system of Kwan into the distributed network access system of Stewart in order to ensure that a client and it's associated user are authentic and authorized to use the system by three

levels of security checks, including physical address authentication of the device, user credential authentication, and VLAN group association checks, thereby increasing security of the system.

Regarding Claim 11,

Stewart does not explicitly disclose that the authenticator resides in a network switch.

Kwan, however, discloses that the authenticator resides in a network switch (Paragraph 56). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the multi-tiered network security system of Kwan into the distributed network access system of Stewart in order to ensure that a client and it's associated user are authentic and authorized to use the system by three levels of security checks, including physical address authentication of the device, user credential authentication, and VLAN group association checks, thereby increasing security of the system.

Regarding Claim 20,

Stewart does not explicitly disclose that the authentication server is included in a network switch.

Kwan, however, discloses that the authentication server is included in a network switch (Paragraph 36). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the multi-tiered network security system of Kwan into the distributed

network access system of Stewart in order to ensure that a client and it's associated user are authentic and authorized to use the system by three levels of security checks, including physical address authentication of the device, user credential authentication, and VLAN group association checks, thereby increasing security of the system.

Regarding Claim 23,

Stewart does not explicitly disclose that the authentication server is a RADIUS server.

Kwan, however, discloses that the authentication server is a RADIUS server (Paragraph 57). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the multi-tiered network security system of Kwan into the distributed network access system of Stewart in order to ensure that a client and it's associated user are authentic and authorized to use the system by three levels of security checks, including physical address authentication of the device, user credential authentication, and VLAN group association checks, thereby increasing security of the system.

Regarding Claim 27,

Stewart discloses a system comprising:

A plurality of edge devices capable of communicating with a plurality of user stations over one or more wireless channels (Column 10, line 64 to Column 11, line 16);

A network switch including a plurality of ports for connecting the edge devices to a network (Figures 2-3; and Column 9, lines 52-64);

An application for requesting station identities from the user stations and for associating location information with each of the station identities (Column 10, line 64 to Column 11, line 53);

An authentication server for deciding whether to grant or deny each of the user stations access to the network based on the corresponding identity and location information (Column 9, lines 28-47; Column 12, line 30 to Column 13, line 10; Column 14, lines 40-56; Column 16, lines 38-55; and Column 18, lines 1-25);

But does not explicitly disclose that the application is run on the network switch.

Kwan, however, discloses an application running on the network switch, for requesting station identities from the user stations (Paragraph 56). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the multi-tiered network security system of Kwan into the distributed network access system of Stewart in order to ensure that a client and it's associated user are authentic and authorized to use the system by three levels of security checks, including physical address authentication of the device, user credential authentication, and VLAN group association checks, thereby increasing security of the system.

Regarding Claim 28,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Stewart discloses that at least one of the edge devices is a wireless access point (Column 10, line 64 to Column 11, line 16).

Regarding Claim 29,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Kwan discloses a user station that is a wired device for directly connecting one of the ports of the network switch (Figure 1; and Paragraph 35).

Regarding Claim 31,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Stewart discloses that the location information indicates the location of one of the edge devices (Column 10, line 64 to Column 11, line 16).

Regarding Claim 33,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Kwan discloses that the network switch includes an authenticator for authenticating the station identities (Paragraph 56).

Regarding Claim 34,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Stewart discloses that the authentication server authenticates the station identities (Column 9, lines 28-47; Column 12, line 30 to Column 13,

line 10; Column 14, lines 40-56; Column 16, lines 38-55; and Column 18, lines 1-25).

Regarding Claim 35,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Stewart discloses that the authentication server includes a policy designating locations, if any, at which the user stations are permitted to connect to the network (Column 11, lines 28-53 and Column 16, lines 38-64).

Regarding Claim 36,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Kwan discloses that the authentication server is a RADIUS server (Paragraph 57).

Regarding Claim 37,

Stewart as modified by Kwan discloses the system of claim 27, in addition, Stewart discloses that the station identities includes information selected from the group consisting of a user name, a user password, a certificate, a MAC address, a shared key, a smart card identifier, and any combination of the foregoing information (Column 10, lines 53-63).

3. Claims 7, 19, 25, 26, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart in view of Lor (U.S. Patent Application Publication 2004/0068668).

Regarding Claim 7,

Stewart does not explicitly disclose using a mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing to authenticate the identity.

Lor, however, discloses using a mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing to authenticate the identity (Paragraphs 42-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

Regarding Claim 43,

Claim 43 is a system claim that corresponds to method claim 7 and is rejected for the same reasons.

Regarding Claim 19,

Stewart does not explicitly disclose an interface for permitting an administrator to associate the location information to the edge device.

Lor, however, discloses an interface for permitting an administrator to associate the location information to the edge device (Paragraphs 54-

55 and 99-104). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

Regarding Claim 25,

Stewart does not explicitly disclose a network switch that comprises an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing.

Lor, however, discloses a network switch that comprises an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing (Paragraphs 42-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

Regarding Claim 26,

Stewart does not explicitly disclose that the authentication server comprises an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing.

Lor, however, discloses that the authentication server comprises an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing (Paragraphs 42-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

4. Claims 8, 17, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart in view of Liming (U.S. Patent Application Publication 2002/0055924).

Regarding Claim 8,

Stewart does not explicitly disclose that the location information indicates the location of a network switch to which the client is attempting to connect.

Liming, however, discloses that the location information indicates the location of a network switch to which the client is attempting to connect (Paragraph 159). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the location context system of Liming into the distributed network access system of Stewart in order to allow the system to associate location information with the client even when the other devices cannot provide such location information, thereby extending the system to be able to be used when the client connects directly to a switch and/or when the other devices between the client and switch do not have any means to associate location information with the client.

Regarding Claim 44,

Claim 44 is a system claim that corresponds to method claim 8 and is rejected for the same reasons.

Regarding Claim 17,

Stewart does not explicitly disclose that the location information indicates the location of a network switch to which the client is attempting to connect.

Liming, however, discloses that the location information indicates the location of a network switch to which the client is attempting to connect (Paragraph 159). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the location context

system of Liming into the distributed network access system of Stewart in order to allow the system to associate location information with the client even when the other devices cannot provide such location information, thereby extending the system to be able to be used when the client connects directly to a switch and/or when the other devices between the client and switch do not have any means to associate location information with the client.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart in view of Kwan, further in view of Liming.

Stewart as modified by Kwan does not explicitly disclose that the location information indicates the location of the network switch.

Liming, however, discloses that the location information indicates the location of the network switch Paragraph 159). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the location context system of Liming into the distributed network access system of Stewart in order to allow the system to associate location information with the client even when the other devices cannot provide such location information, thereby extending the system to be able to be used when the client connects directly to a switch and/or when the other devices between the client and switch do not have any means to associate location information with the client.

6. Claims 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart in view of Kwan, further in view of Lor.

Regarding Claim 32,

Stewart as modified by Kwan does not explicitly disclose that the network switch includes an interface for permitting an administrator to associate the location information to the edge devices.

Lor, however, discloses that the network switch includes an interface for permitting an administrator to associate the location information to the edge devices (Paragraphs 54-55 and 99-104). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

Regarding Claim 38,

Stewart as modified by Kwan does not explicitly disclose an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and any combination of the foregoing.

Lor, however, discloses an authentication mechanism selected from the group consisting of TLS, TTLS, MD5, EAP-TTLS, EAP-TLS, and

any combination of the foregoing (Paragraphs 42-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wireless LAN switching system of Lor into the distributed network access system of Stewart as modified by Kwan in order to provide additional levels of access control, authentication, and authorization, such that access may be controlled by client identity, time, location, and application and/or to provide ease in re-association when a client moves from one location to another.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY D. POPHAM whose telephone number is (571)272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham
Examiner
Art Unit 2137

/Jeffrey D Popham/
Examiner, Art Unit 2137

/Emmanuel L. Moise/
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